ories." Other graduate lecture courses in physics are announced on "Relativity" (Lunn), "Wireless Waves" (Kinsley), "Radiation Theories" (Millikan).

DR. FRANKLIN D. BARKER has completed ten years of service in the University of Nebraska and has been made a full professor, having charge of the work in medical zoology and parasitology in the department of zoology.

DR. IRA D. CARDIFF, professor of plant physiology and bacteriology in Washington State College, has been appointed head of the department of botany. Professor John G. Hall, of the South Carolina Agricultural College, has been appointed professor of plant pathology in the same institution.

To the professorship of bacteriology in Columbia University made vacant by the death of Dr. Philip Hanson Hiss, Dr. Hans Zinsser, professor of bacteriology in Leland Stanford University, has been appointed.

DISCUSSION AND CORRESPONDENCE

UNIVERSITY LIFE IN IDAHO

TO THE EDITOR OF SCIENCE: Professor J. M. Aldrich, professor of zoology and entomology in the University of Idaho (Moscow), has just been summarily dismissed without trial or official warning after twenty years of faithful and successful service. The conspicuous incidents connected with this matter are few, simple and suggestive. They are the following:

In 1900 James A. McLean, a young Canadian, came to the University as president and director of the agricultural experiment station. He was a doctor of philosophy from Columbia in economics. He found the duties of director of an agricultural experiment station bewildering and uncongenial.

In 1904 Professor Aldrich with five other members of the faculty protested to the board of regents that the president was incompetent for his place. Strangely neither the president nor the protesting professors were dismissed but a compromise was effected which endured for eight years. It may be inferred from later occurrences that despite the long and healing lapse of time, the criticized president did not forget nor forgive his critics.

In 1912 President McLean left Idaho to become the president of the University of Manitoba. Before he left he made out, and gave to the board of regents, a list of professors who ought to be dismissed.

Near the end of 1912, Idaho did away with all separate boards for its various educational institutions and put its whole system in charge of a single new board. The law enacting this provided that the old boards shall hold their last meetings in the following spring.

In April, 1913, President McLean, of the University of Manitoba, crossed an international boundary and the boundary of decency and in secret session with the acting president of the University of Idaho made up a list of seven undesirable professors which list was presented to the dying board of regents and promptly acted on. All were dismissed. At the end of the meeting the board died, and its victims received their malodorous notices of dismissal two days after the board had been defunct. Thus Professor Aldrich and six colleagues have enjoyed the peculiar experience of being removed from their positions on the recommendation of a citizen of Manitoba by an official board which passed out of existence before the victims knew what had happened to them.

An appeal to Governor Haines of Idaho has resulted in an official statement that the regents acted entirely within their authority.

No comment seems necessary on these interesting incidents. Professor Aldrich, who is an unusually competent entomologist, and a peculiarly prepossessing and attractive man, will of course have no difficulty in finding work elsewhere. Will Idaho have as little difficulty in getting as good a man to fill his place?

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EDUCATIONAL STANDARDS AT AN AGRICULTURAL COLLEGE

PERFECT freedom in the expression of ideas and opinions is born of one of two conditions, either full information, or lack of informa-

tion. Any other condition suggests the advisability of caution. Dr. Pritchett in his letter to the Iowa Board of Education speaks with a freedom and confidence suggesting the most intimate acquaintance possible with the ideals, the strength and the attainments of colleges of agriculture. The prescription which he gives appears within itself to follow the most searching and conclusive diagnosis.

Dr. Pritchett's diagnosis consists of two main parts: first, agricultural education, at least for Iowa, should be of a trade school standard and type; and second, agricultural education must be isolated from other lines, particularly from engineering.

Regarding the first of these specifications Dr. Pritchett says:

> The school of agriculture ought to teach preeminently the trade of farming, even though it does research in its experimental station, and conducts certain classes of high order, its primary function ought to be not the training of agricultural teachers, but the training of farmers, and the cultivation of the means by which the scientific knowledge in a practical form can be put into the hands of farmers. The great part of the work is not on a professional plane. Students of agriculture ought not to be required to comply with the same academic standards as those who expect to enter the profession of engineering. . . . In my judgment the interests of agriculture will be subserved by making the agricultural college a straight-out school of agriculture, with entrance requirements suited to the needs of those who wish to become practical farmers. I should not make these academic requirements for admission higher than the equipment afforded by the elementary schools.

This at least has the merit of being explicit. Dr. Pritchett would take the boy at the same stage of development required for entrance into the freshman year of the high school, and after getting him into this so-called college would teach him how to farm. The objections to this academic program are many, but possibly an illustration may serve the purpose. A man concerned in educational matters in Tennessee had been converted to the agricultural point of view. He made no such mistake as to go to the people with messages of chemistry, botany or zoology, but on the contrary advocated eminently practical measures. At a meeting up in the hill country he made an address in which he labored long and arduously to prove to the audience that every boy, and every girl, should know how to milk a cow, and to this end should attend an agricultural college. After wearing himself and the audience pretty well out he threw the meeting open for remarks and discussion. After a painful silence, a gaunt old man with hay-colored whiskers, the principal of a theological seminary, arose. "Stranger," said he, "I agree with you that every boy, black or white, should know how to milk a cow. I even agree that every girl should include this art along with her other accomplishments. However, I want to make this suggestion: Wouldn't it be a good thing for a college to teach its students something that a calf couldn't beat 'em at?"

If the farmers send their sons to the agricultural college in order that they may learn how to farm there are going to be a lot of disappointed farmers. At Wheaton, Illinois, plowing matches are held each fall and men who never saw a college do plowing so nearly perfectly that only those experienced in the accomplishment are able to act as judges. This skill could be learned at college, no doubt, but why run a college for teaching an art which can be learned readily in connection with farming operations? The college could no doubt develop great proficiency in the art of husking corn, but it is doubtful whether it could out-do boys who never so much as finished the country school. There are hundreds of men in Iowa who can feed cattle so successfully that few colleges would care to compete with them in the results to be obtained as judged in dollars.

What the farmer should, and does, demand of the college is a solution of the problems which are too intricate for him to solve for himself. The farmer can put fat onto steers about as rapidly as can a college professor, but he can not analyze feeds. Neither can the farmer analyze his soils or identify the pests that infect his crops. Should the college

undertake to teach these things along with the practise of farming to a lad just out of the eighth grade? Manifestly not, and for the reason that to him that hath shall be given. Few of the well-prepared boys who enter college make good scientists. Almost none of those entering Dr. Pritchett's ideal school would be able to comprehend scientific problems at all. They would go back to the farms because unprepared for any of the more advanced lines of agricultural work.

Dr. Pritchett believes that the Iowa State College has turned out more lawyers than farmers. It is too bad to break down a system of beliefs by ruthlessly intruding the facts, but the information at hand shows that about two fifths of the recent graduates of the agricultural courses are engaged in actual farming, while only 5 to 7 per cent. are in non-agricultural work. But few of the graduates have become lawyers. Until the demand for teachers and experimentalists is met it is hard to comprehend where they are to be trained if not at agricultural colleges. It is also difficult to see how these men could be more useful to the state by working a farm than by teaching the sciences pertaining to farming, editing farm papers, or testing hypotheses concerning the application of science to agriculture. This answer must be either that all scientific research is now complete, or else that scientific research is not worth while, since, forsooth, the agricultural college should make its main work the teaching of the art of farming.

The second thing needful in realizing Dr. Pritchett's ideal in agricultural school effort is isolation. This needs no discussion, since the grade of education he has in mind certainly could not flourish in a college, alongside of, and on a par with, real college work. However, the world is big and there is a place for the grade of instruction which the doctor has in mind. In fact it is being offered in the numerous short courses at the college and over the state. There will be more such short courses in the future, but the college will hardly go out of business in order to make room for them. It is not improbable that county agricultural high schools, or even township schools may, in a way which the college could not, meet the needs which Dr. Pritchett has in mind. Something of the sort has been begun. In Europe this kind of instruction is common, but the agricultural colleges are not sacrificed in order that it may be done. On the contrary, they furnish the teachers and a large part of the subject matter for the courses given in the lower grade schools. A paragraph from Dean Bailey, of Cornell, often called a prophet in agriculture, will not be amiss:

> An internal danger is the giving of instruction in colleges of agriculture that is not founded on good preparation of the student or is not organized on a sound educational basis. Winter-course and special students may be admitted, and extension work must be done; but the first responsibility of a college of agriculture is to give a good educational course; it deals with education rather than with agriculture, and its success in the end will depend on the reputation it makes with school men.

B. H. HIBBARD

A CALL FOR AMPLE AND TRUSTWORTHY VITAL STATISTICS

THE appeal of Dr. J. Madison Taylor, published in SCIENCE, October 11, 1912, for a more general and critical body of human statistics is one which should elicit a ready response upon the part of scientific men generally. No one who has had occasion to investigate a problem involving data of human history but can confirm the deficiencies to which Dr. Taylor refers. Something over a year ago the present writer began an inquiry relating to educational betterment which led to a search of various documents such as yearbooks, census reports, reports of the Bureau of Education, etc., and it soon became apparent that these sources were noteworthy for what they did not contain. In other words, they were woefully lacking in just that class of data which were vital to the inquiry in hand. An inquiry as to the existence of personal and family records soon revealed the fact that here, even more than in the other sources, except in rare instances, it was almost impossible to discover data of any adequate or reliable character.

The importance of such data in their rela-